

REMARKS

Claims 17–23, 25 and 46–59 are pending in the present application.

Claims 17–23, 25 and 58–59 have been withdrawn, but not canceled.

Claim 54 was amended to correct an antecedent basis error. Claim 55 was amended solely for clarity.

Reconsideration of the claims is respectfully requested.

Request for Reconsideration of Restriction Requirement

Applicants respectfully request reconsideration of the Restriction Requirement.

The Office Action asserts that Applicants' traversal of the Restriction Requirement is moot since the inventions of Groups I and II are further distinct because chemical vapor deposition (CVD) may be used to deposit an oxide layer over the gate structure instead of reoxidizing the gate structure to form the oxide layer. However, restriction is only proper where the claims are independent or distinct. MPEP § 806. In passing on questions of restriction, the claimed subject matter must be compared in order to determine distinctness and independence. MPEP § 806.01. As noted in the Office Action, structure claims 46–49, 52–53 and 56 in the present application do not recite an oxide layer over the gate structure. Therefore, the manner in which an oxide layer is formed over the structure recited in claims 46–49 does not distinguish those claims from process claims 17–23, 25 and 58–59.

Moreover, structure claims 50–51 and 54–55 recite reoxidation of the gate structure, and are therefore not distinguishable from process claims 17–23, 25 and 58–59.

In addition, a process of making and the product made are distinct inventions only if: (A) the process as claimed is not an obvious process of making the product and can be used to make other and different products; and (B) the product as claimed can be made by another and materially different process. The Restriction Requirement provides no basis for concluding that forming the oxide layer over the gate structure by chemical vapor deposition is materially different--i.e., patentably distinct--over forming the oxide layer over the gate structure by reoxidation.

35 U.S.C. § 102 (Anticipation)

Claims 48 and 48 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,422,291 to *Clementi et al.* This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

Independent claim 46 recites a nitride layer on the gate oxide layer. Such a feature is not depicted or described in the cited reference. *Clementi et al* depicts in Figure 12 and describes in the

associated text a gate structure including a gate oxide 4, a polysilicon floating gate 5 on the gate oxide 4, and a composite O-N-RTN layer 6 including nitridized polysilicon 6a, silicon nitride 6b, and oxidized silicon nitride 6c on the polysilicon floating gate 5. Thus, *Clementi et al* is silent as to a nitride layer on a gate oxide, depicting and describing instead a nitride layer over the gate oxide.

Therefore, Applicant respectfully requests withdrawal of the rejection of claims 46 and 48 under 35 U.S.C. § 102.

35 U.S.C. § 103 (Obviousness)

Claims 47 and 56–57 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Clementi et al*. This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant

of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

As noted above, independent claim 46 recites at least one feature not depicted or described in *Clementi et al.* Moreover, no motivation or incentive for modifying the teachings of *Clementi et al.* to achieve the claimed invention has been identified, nor any basis for deriving a reasonable expectation of success in making such modification.

In addition, the statement concerning the dimensional parameters recited in claims 47 and 56–57 within the Office Action is not an accurate statement of the current law. Obviousness inquiries, due to their highly fact-specific and fact-intensive nature, have been deemed not to be

amenable to *per se* rules such as that expressed in the Office Action. *In re Ochiai*, 71 F.3d 1565, 1569 (Fed. Cir. 1995). Mere citation of a *per se* rule regarding what constitutes obvious modifications, without identifying a motivation or incentive for the proposed modification, does not establish a *prima facie* case of obviousness.

Therefore, Applicant respectfully requests withdrawal of the rejection of claims 47 and 56–57 under 35 U.S.C. § 103.

35 U.S.C. § 101 (Double Patenting)

Claims 46–55 were rejected under the judicially created doctrine of obviousness-type (nonstatutory) double patenting grounded in 35 U.S.C. § 101.

Applicant respectfully requests that the requirement of a terminal disclaimer be deferred until subject matter is held allowable in this application.

AMENDMENTS WITH MARKINGS TO SHOW CHANGES MADE:

Claims 54–55 were amended herein as follows:

1 54. (amended) The integrated circuit device of claim [53]51, wherein the source/drain regions are
2 implanted prior to reoxidation.

1 55. (amended) The integrated circuit device of claim 53, wherein the source/drain regions are
2 implanted after reoxidation.

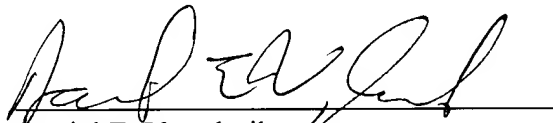
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *dvenglarik@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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Date: 2-21-03


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